UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,276	02/14/2006	Xiaoshan Wei	470061.402USPC	5924

500   7590   04/09/2009
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC
701 FIFTH AVE
SUITE 5400
SEATTLE, WA 98104

EXAMINER
NICKERSON, JEFFREY L

ART UNIT	PAPER NUMBER
2442	

MAIL DATE	DELIVERY MODE
04/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>27 January 2009</u>.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-5* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-5* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

DETAILED ACTION

1.   This communication is in response to Application No. 10/533,276 filed nationally

on 14 February 2006 and internationally on 13 August 2003. The amendment

presented on 27 January 2009, which provides change to the specification, provides

change to claims 1 and 4-5, and cancels claims 6-8, is hereby acknowledged. Claims 1-

5 have been examined.

Specification

2.   The amendment presented on 27 January 2009 providing change to the

specification is noted. All prior objections to the specification are hereby withdrawn.

Claim Objections

3.   The amendment presented on 27 January 2009 providing change to the claims is

noted. All prior objections to the claims are therefore obviated and hereby withdrawn.

Response to Arguments

4.   Applicant's arguments filed 27 January 2009 have been fully considered and are

ultimately deemed persuasive. However, new rejections may appear below.

Independent claim 1

Applicant argues the combined teachings of Bullard (US 6,405,251 B1) and Schweitzer

(US 6,418,467) do not teach several limitations found within this claim. Specifically,

applicant argues the combined teachings do not teach the following limitation:

> *"the user's network resource information comprising a user's account number, a*
>
> *start time of network access, a stop time of network access, an IP address, a*
>
> *network access location, and a service attribute".*

Applicant's arguments are persuasive and, therefore, the rejections of these claims are

hereby withdrawn.

Dependent claims 2-5

Applicant argues these claims conditionally on that of their parent independent claim.

Applicant's arguments are persuasive and, therefore, the rejections of these claims are

hereby withdrawn.

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

6.   Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bullard et al (US 6,405,251 B1), and in further view of Schweitzer et al (US 6,418,467

B1) and Malik et al (US 7,155,608 B1).

Regarding claim 1, Bullard teaches a method for collecting network usage data of a

user, comprising the following steps:

        an access device (RAC's) authenticating and authorizing the user (Bullard:

Figure 1, item 12d; Figure 3, items 102; col 7, line 16-38);

        a router, during network access, recording network usage information and

sending the network usage information to a NetStream Collector with UDP messages

(Bullard: Figure 1, item 12a to items 18; See also Figures 2, 3; col 2, line 25 – col 3, line

54; col 24, line 48-55 for UDP use);

        wherein the network usage information comprises a source IP address, a

destination IP address, a source port number, a destination port number, a number of

bytes, and a timestamp (Bullard: col 8, line 1 – col 9, line 53; Table 1; Figure 11E);

        the NSC aggregating the collected network usage information (Bullard: Figure 1,

item 14; See also Figures 7, 18; col 19, lines 4-30 for aggregation);

an association analysis server performing association analysis for the

aggregated network usage information and the user's network resource information to

obtain detailed network usage data of the user (Bullard: Figure 1, item 13; See also

Figures 2, 3; col 7, lines 16-38 provides AAA server supplies information; col 18, lines

39-67; col 19, line 44 – col 20, line 45).

Bullard does not teach an AAA server recording the user's network resource

information and uploading from the AAA server;

wherein the user's network resource information comprises a user's account

number, a start time of network access, a stop time of network access, an IP address, a

network access location, and a service attribute;

association/correlation and aggregation occurring in real-time; or

wherein the association analysis comprises matching the IP address and a start

time and a stop time of network access in the user's network resource information to an

IP address and a timestamp in the network usage information to determine the user

corresponding to the network usage information.

Schweitzer, in a similar filed of endeavor, specifies real-time

association/correlation and aggregation (Schweitzer: col 3, line 65 – col 4, line 5);

an AAA server recording the user's network resource information and uploading

from the AAA server (Schweitzer: Figure 1; Figure 4B, item 494; col 4, lines 39-51; col

11, lines 25-67);

wherein the user's network resource information comprising a user's account

number (user name), a start time of network access (login timestamp), a stop time of

network access (logout timestamp), an IP address, and a service attribute (QoS policy) (Schweitzer: Figure 1; Figure 4B, items 494 and 496);

wherein the network usage information comprises a source IP address, a destination IP address, a destination port number, a number of bytes, and a timestamp (Schweitzer: Figure 4B, item 492); and

wherein the association analysis comprises matching the IP address and a start time and a stop time of network access in the user's network resource information to an IP address and a timestamp in the network usage information to determine the user corresponding to the network usage information (Schweitzer: Figure 4B, item 492 mapping to 494 to 499; col 7, lines 9-60 for aggregation).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Schweitzer for maintaining user resource information in the AAA server and passing this information to the analysis server. The teachings of Schweitzer, when implemented in the Bullard system, will allow one of ordinary skill in the art to provide more in-depth information from the RADIUS server for subsequent flow collection and analysis. One of ordinary skill in the art would be motivated to utilize the teachings of Schweitzer in the Bullard system in order to increase the accuracy and efficiency of flow correlation and analysis.

The Bullard/Schweitzer system does not teach wherein the user's network resource information comprises a network access location.

Malik, in a similar field of endeavor, teaches wherein the user's network resource information comprises a network access location (Malik: col 5, lines 15-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malik for maintaining a station ID of the user. The teachings of Malik, when implemented in the Bullard/Schweitzer system, will allow one of ordinary skill in the art to increase the accuracy of mapping network usage to users and vice versa. One of ordinary skill in the art would be motivated to utilize the teachings of Malik in the Bullard/Schweitzer system in order to utilize a many-to-one network configuration between network access devices and AAA servers.

Regarding claim 2, the Bullard/Schweitzer/Malik system teaches wherein the access device is one of a LAN switch, an access server, and an IP phone gateway (Bullard: Figure 1, items in 16; See also Figure 2, items 42a-42g).

Regarding claim 3, the Bullard/Schweitzer/Malik system teaches the access device authenticating and authorizing the user and the AAA server recording the user's network resource information further comprising the following steps:

the access device (NAS server) sending the user's authentication and authorization data to the AAA server (Malik: Figure 1, step 2; Figure 4; See also col 4, line 38 – col 6, line 2);

the AAA server analyzing and recording the user's authentication and authorization data (Schweitzer: Figure 1; Figure 4B, item 494; col 4, lines 39-51; col 11, lines 25-67), and sending control information of the network access permission to the access device (Malik: Figure 1, step 3; Figure 4; See also col 4, line 38 – col 6, line 2);

the AAA server recording the user's network resource information (Schweitzer:

Figure 4B, item 494);

the access device allocating resources to the user and sending the user's

network resources information to the AAA server (Malik: Figure 1, step 4; Figure 4, step

425; See also col 4, line 38 – col 6, line 2); and

the AAA server forwarding the user's network resource information to the

association analysis server in real-time (Schweitzer: Figure 1; Figure 4B, item 494; col

4, lines 39-51; col 11, lines 25-67; col 3, line 65 – col 4, line 5).

7.   Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bullard et al (US 6,405,251 B1), in view of Schweitzer et al (US 6,418,467 B1) and

Malik et al (US 7,155,608 B1), and in further view of Official Notice.

Regarding claims 4-5, the Bullard/Schweitzer/Malik system teaches allocating resources

such as an IP address (Malik: col 5, lines 1-5).

The Bullard/Schweitzer/Malik system does not teach allocating network

resources such as start time and stop time of network access, or a bandwidth.

An official notice is taken that such use of allocating network resource

information such as start time, stop time, and bandwidth by network access devices was

well known in the art at the time the invention was made by one of ordinary skill in the

art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize any known network access attribute for allocation restrictions including start time, stop time, and bandwidth, because it would have enabled practicing the Bullard/Schweitzer/Malik system.

Citation of Pertinent Prior Art

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.   Givoly (US 7,496,670 B1) discloses a network usage aggregation system that maps network information to user information.

b.   Ramakrishnan et al (US 7,457,865 B2) discloses a network usage and billing system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JEFFREY NICKERSON whose telephone number is

(571)270-3631. The examiner can normally be reached on M-Th, 9:00am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./   /Andrew Caldwell/
Jeffrey Nickerson   Supervisory Patent Examiner, Art
Examiner, Art Unit 2442   Unit 2442